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# Results of AAS measurements of atmospheric trace metals deposition in snow cover in lower kama urban agglomeration

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## Abstract

The study of pollutant level of snow cover of the explored territory required establishment of more than 80 sample plots within the territory of several hundreds square kilometers including industrial area of Naberezhnye Chelny (steam power plants, JSC KAMAZ plants, etc.), which are exposed to intense human impact of the area of agroindustrial complex of the Tukai district, the part of "Lower Kama" national park area, and the territory of the city of Naberezhnye Chelny as well. Within the framework of the study snow sampling was carried out within these sample plots, its main features and contaminators' weight content were defined. Moreover, the results of long-term observations over snow cover state of the territory of the Naberezhnye Chelny (Lower Kama) urban agglomeration that allow - taking into account synoptic conditions by the end of cold period - forecasting the beginning of intense snow melting and planning snow-measuring measures and sampling correspondingly. To assess impact on environment, accumulated with snow and soil cover of pollutants, their inflow per unit area and per explored territory was estimated. Obtained results allowed to asses the snow cover contamination level by several complex indicators. The snow cover contamination level based on this data should be recognized as quite considerable: median value of contamination total index Kp5 is 15,1 that allow us to relate this territory to heavily polluted. Whereby partial coefficients of contamination with cooper and zinc, and manganese iron and nickel to a somewhat less degree, make a major contribution to this index.

## Keywords

Anthropogenic impacts, Background contents, Heavy metals, Lower Kama agglomeration, Snow cover